

## ABSTRACT OF THE DISCLOSURE

In a wiring structure of a semiconductor device, dielectric tolerance of the wiring is improved by preventing diffusion of the wiring material. The wiring structure of the semiconductor device includes a first insulating film having plural grooves, plural wiring films formed protrusively above tops of the first insulating film among the grooves, plural barrier films formed on bottoms of the wiring films and up to a higher position than the tops on sides of the wiring films, first cap films comprising metal films formed on tops of the wiring films, and a second cap film formed on at least respective sides of the first cap films and the barrier films.